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Natchitoches News

U.S. FISH & WILDLIFE SERVICE

Who We Are, What We Do

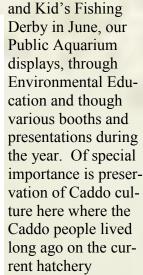
By: Jan Dean

December is a time of year in which we get out of our regular work routine for the holidays, for travel, for visiting with family and friends. It is also a time for end-of-year reporting, this year has involved the extensive changes to FBMS, and our long-time manager, Karen Kilpatrick, retired, so that has led to training for me and to many changes in responsibilities as I accept new roles... for now. It is also a time for reflection on who we are and what we do, especially with all of the re-

cent changes. Who we are has changed in some areas since I came to work here in 1997. Mostly that has been in the area of the biologist and a maintenance person. Karen left in December, and a long-time maintenance person, Dennis Scarbrough, will be leaving soon...probably really soon due to the early retirement op-

tion. In these tough budget times, we may have to continue on with four employees for quite a while. For now, that means Lana Litton, Tony Brady, Wade Scarbrough and me.

The What We Do question has also changed in the past couple of years. We have switched emphasis from pallid sturgeon and paddlefish to alligator gar, alligator snapping turtles and the Louisiana pearlshell mussel. We have also gotten into other mussel surveys, some fish passage work and some research into aquatic invasive species such as Asian carp. And more AIS work may be on the horizon. Our long-time partnership with the State of Louisiana remains strong, though they may need us less for rearing recreational fish because of pond rehabilitation work in their hatchery system. We are overwintering alligator snapping turtles for the State right now in their first turtle rearing year. We serve the public though our annual Open House



rent hatchery
grounds. We have
enjoyed a good relationship with the Caddo Nation who now have their headquarters in Binger,
Oklahoma.

Some of the impetus for this article was the requirement for a Fact Sheet on our Fisheries Information System (FIS) web site. Trying to put who you are and what you do on one page is a bit sobering, though it does help one focus on priorities and activities in the new year. With that in mind, I look forward to 2012.



NATCHITOCHES NATIONAL FISH HATCHERY ASSIST GRADUATE STUDENT WITH RESEARCH PROJECT BY: TONY BRADY

If you have been following the Natchitoches National Fish Hatchery's (NNFH) newsletters, you may remember a story in our August 2011 issue about a fish and mussel kill investigation that took place on the West Pearl River in Southeast Louisiana. While working that investigation, the hatchery's mussel biologist was able to meet and make new working contacts with Baton Rouge Fish and Wildlife Conservation Office, Louisiana Department of Wildlife and Fisheries, and Louisiana State University (LSU). Through these contacts, an exciting opportunity has been presented to NNFH. Wesley Daniels from LSU passed along the hatchery's contact information to a former LSU student Angela Williamson who is currently a graduate student at the University of New Orleans. Angela was looking to do some work with freshwater mussels for her Master's thesis and contacted the hatchery about a possible thesis project. Several ideas

were tossed around and, after approval from her graduate professor Dr. Martin O'Connell, a project was agreed upon. Angela will be conducting host fish studies on the Louisiana pearlshell mussel as well as looking at possible factors influencing glochidial development. The hatchery will provide Angela a place to stay while she is in Natchitoches working on the project as well as supervise her activities



Angela Williamson from the University of New Orleans is assisting Ted Soileau (USFS) place a temperature data logger in a mussel stream.

while in the field. Natchitoches NFH is honored to be able to assist in Angela's pursuit of her Master's degree, and we look forward to working with her this spring. For more information on Angela's project please see the following article.

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GEARING UP FOR A NEW YEAR OF RESEARCH BY: TONY BRADY

In the US Fish and Wildlife Service, most stations are working diligently in December to finish projects, write end-of-the-year reports, and squeeze in the last of their vacation time to enjoy the holidays with their families. While the same is true at Natchitoches National Fish Hatchery (NNFH), the staff at NNFH wasn't just winding down the year in December. For two days in December, NNFH worked with the US Forest Service (USFS) and Angela Williamson, a graduate student from the University of New Orleans, to gear up for research that will be conducted in 2012. One of the ongoing projects at NNFH is to learn about the life history of the Louisiana pearlshell mussel (LPM). From the research conducted in the spring of 2011, we were able to narrow down when the female LPMs were developing their larva called glochidia. However, this research also presented additional questions to be answered. The development of glochidia varied by two weeks between the two mussel beds studied. In 2012, plans are to study what caused the difference in the timing of the glochidial development. To gear up for



A temperature data logger is anchored to the stream bed where it will record water temperatures for this study.



Ted Soileau (USFS) and Tony Brady (USFWS) anchoring a data logger into Castor Creek.

this research, staff members from NNFH and USFS, and Williamson placed temperature data loggers in most of the streams that are home to LPMs. These data loggers will record water temperature six times daily for the next year and, starting in February, several mussel beds will be examined on a weekly basis to document the development of glochidia. These observations will be compared to the temperature data collected and their latitude within the known range of LPMs to see if either variable affects the timing of glochidial development. A second question that will be addressed in 2012 is determining the fish species LPM need to complete their life cycle. The glochidia of nearly all mussels spend their larval stage attached to the fins or gills of fish. While attached to the fish, the glochidia complete their development into free-living mussels. The answers to these questions will aid in the development of a propagation program at NNFH should one be necessary in the future to protect LPM from threats that could lead to extinction.





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Saving the world, one species at a time

Natchitoches National Fish Hatchery montage. Included are Caddo cultural heritage (Caddoan Princess at dance, plaque at Caddo Memorial Plaza), aquatic education and connecting kids with nature, the Louisiana pearlshell mussel, an alligator gar and an alligator snapping turtle.

